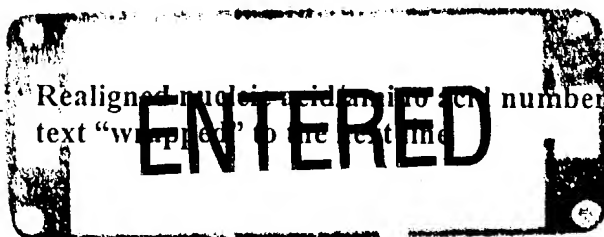


1FWO

CRF Errors Edited by the STIC Systems Branch

Serial Number: 10/668,846A

CRF Edit Date: 9/7/04
Edited by: AE



___ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

___ Corrected the SEQ ID NO. Sequence numbers edited were:

___ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

___ Deleted: ___ invalid beginning/end-of-file text ; ___ page numbers

___ Inserted mandatory headings/numeric identifiers, specifically:

___ Moved responses to same line as heading/numeric identifier, specifically:

✓ Other:
Corrected <1517 numeric identifier; added <1417 numeric identifier



IFWO

RAW SEQUENCE LISTING

DATE: 09/07/2004

PATENT APPLICATION: US/10/668,846A

TIME: 17:04:13

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09072004\J668846A.raw

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4 <110> APPLICANT: Graham D. Smith
5   Philip David Hayes
6   Darren Smart
8 <120> TITLE OF INVENTION: Novel Compounds
11 <130> FILE REFERENCE: GP30201V
13 <140> CURRENT APPLICATION NUMBER: 10/668,846A
14 <141> CURRENT FILING DATE: 2003-09-23
16 <150> PRIOR APPLICATION NUMBER: GB9905557.6
17 <151> PRIOR FILING DATE: 1999-03-11
19 <150> PRIOR APPLICATION NUMBER: GB9923635.8
20 <151> PRIOR FILING DATE: 1999-10-06
23 <160> NUMBER OF SEQ ID NOS: 4
25 <170> SOFTWARE: FastSEQ for Windows Version 3.0
27 <210> SEQ ID NO: 1
28 <211> LENGTH: 2616
29 <212> TYPE: DNA
30 <213> ORGANISM: Homo sapiens
32 <400> SEQUENCE: 1
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34 gatgagagtg gcaccccgagg tggggaggct tttcctctct cctccctggc caatctgttt      120
35 gagggggagg atggctccct ttcgccctca ccggtgatg ccagtcgccc tgctggccca      180
36 ggcgatgggc gaccaaattc gcgcataaag ttccagggcg ccttcgcaa gggggtgccc      240
37 aaccccatcg atctgctgga gtccacccta tatgagtcct cgggtggtgcc tggggcccaag      300
38 aaagcaccca tggactcact gtttgactac ggcacctatc gtcaccactc cagtgcacaac      360
39 aagaggtgga ggaagaagat catagagaag cagccgcaga gccccaaagc ccctgcccct      420
40 cagccgcccc ccattcctcaa agtcttcaac cggcctatcc tctttgacat cgtgtcccgg      480
41 ggctccactg ctgacctgga cgggctgctc ccattcttgc tgaccacaa gaaacgccta      540
42 actgatgagg agtttcgaga gccatctacg gggaagacct gcctgcccga ggccttgctg      600
43 aacctgagca atggccgcaa cgacaccatc cctgtgctgc tggacatcgc ggagcgcacc      660
44 ggcaacatgc gggagttcat taactcgccc ttccgtgaca tctactatcg aggtcagaca      720
45 gccctgcaca tcgccattga gcgtcgctgc aaacactacg tggaaacttct cgtggcccgag      780
46 ggagctgatg tccacgcccc gggccgtggg cgcttcttcc agcccaagga tgaggggggg      840
47 tactttact ttggggagct gcccctgtcg ctggctgcct gcaccaacca gcccacatt      900
48 gtcaactacc tgacggagaa cccccacaag aaggcggaca tgcggcgcca ggaactcgca      960
49 ggcaacacag tgctgcatgc gctggtggcc attgctgaca acaccctga gaacaccaag      1020
50 tttgttacca agatgtacga cctgctgctg ctcaagtgtg ccgcctctt ccccgacagc      1080
51 aacctggagg ccgtgctcaa caacgacggc ctctcgcccc tcatgatggc tgccaagacg      1140
52 ggcaagattg ggaattttca gcacatcatc cggcgggagg tgacggatga ggacacacgg      1200
53 cacctgtccc gcaagttcaa ggactggggc tatggggcag tgtattcctc gctttatgac      1260
54 ctctcctccc tggacacgtg tgggggaagag gcctccgtgc tggagatcct ggtgtacaac      1320
55 agcaagattg agaaccgcca cgagatgctg gctgtggagc ccatcaatga actgctgcgg      1380
56 gacaagtggc gcaagttcgg ggccgtctcc ttctacatca acgtggtctc ctacctgtgt      1440
57 gccatgggtc tcttcaactc caccgcctac taccagccgc tggagggcac accgcctac      1500

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RAW SEQUENCE LISTING

DATE: 09/07/2004

PATENT APPLICATION: US/10/668,846A

TIME: 17:04:13

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09072004\J668846A.raw

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59 ggggtcctgt tcttcttcac caacatcaaa gacttggtca tgaagaaatg ccctggagtg 1620
60 aattctctct tcattgatgg ctccctccag ctgctctact tcatctactc tgcctggtg 1680
61 atcgtctcag cagccctcta cctggcaggg atcgaggcct acctggccgt gatggctctt 1740
62 gccctgggtc tgggctggat gaatgccctt tacttcaccc gtgggctgaa gctgacgggg 1800
63 acctatagca tcatgatcca gaagattctc ttcaaggacc ttttccgatt cctgctcgtc 1860
64 tacttgctct tcatgatcgg ctacgcttca gccctgggtc cctcctgaa cccgtgtgcc 1920
65 aacatgaagg tgtgcaatga ggaccagacc aactgcacag tgcccactta cccctcgtgc 1980
66 cgtgacagcg agaccttcag caccctcctc ctggacctgt ttaagctgac cattggcatg 2040
67 ggcgacctgg agatgctgag cagcaccaag taccctgggt tcttcatcat cctgctgggtg 2100
68 acctacatca tcctcacctt tgtgctgctc ctcaacatgc tcattgccct catgggcgag 2160
69 acagtgggcc aggtctccaa ggagagcaag cacatctgga agctgcagtg ggccaccacc 2220
70 atcctggaca ttgagcgctc cttcccgcga ttctgagga aggccttcct cctggtggag 2280
71 atggtcaccg tgggcaagag ctggacggc actcctgacc gcaggtggtg cttcaggggtg 2340
72 gatgaggtga actggtctca ctggaaccag aacttgggca tcatcaacga ggacccgggc 2400
73 aagaatgaga cctaccagta ttatggttc tcgcataccg tgggcccgcct ccgcagggat 2460
74 cgctggctct cggtggtacc ccgcgtgggt gaactgaaca agaactcgaa cccggacgag 2520
75 gtggtggtgc ctctggacag catggggaac ccccgctgcg atggccacca gcagggttac 2580
76 ccccgcaagt ggaggactga tgacgccccg ctctag 2616

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78 <210> SEQ ID NO: 2

79 <211> LENGTH: 871

80 <212> TYPE: PRT

81 <213> ORGANISM: Homo sapiens

83 <400> SEQUENCE: 2

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84 Met Ala Asp Ser Ser Glu Gly Pro Arg Ala Gly Pro Gly Glu Val Ala
85 1 5 10 15
86 Glu Leu Pro Gly Asp Glu Ser Gly Thr Pro Gly Gly Glu Ala Phe Pro
87 20 25 30
88 Leu Ser Ser Leu Ala Asn Leu Phe Glu Gly Glu Asp Gly Ser Leu Ser
89 35 40 45
90 Pro Ser Pro Ala Asp Ala Ser Arg Pro Ala Gly Pro Gly Asp Gly Arg
91 50 55 60
92 Pro Asn Leu Arg Met Lys Phe Gln Gly Ala Phe Arg Lys Gly Val Pro
93 65 70 75 80
94 Asn Pro Ile Asp Leu Leu Glu Ser Thr Leu Tyr Glu Ser Ser Val Val
95 85 90 95
96 Pro Gly Pro Lys Lys Ala Pro Met Asp Ser Leu Phe Asp Tyr Gly Thr
97 100 105 110
98 Tyr Arg His His Ser Ser Asp Asn Lys Arg Trp Arg Lys Lys Ile Ile
99 115 120 125
100 Glu Lys Gln Pro Gln Ser Pro Lys Ala Pro Ala Pro Gln Pro Pro Pro
101 130 135 140
102 Ile Leu Lys Val Phe Asn Arg Pro Ile Leu Phe Asp Ile Val Ser Arg
103 145 150 155 160
104 Gly Ser Thr Ala Asp Leu Asp Gly Leu Leu Pro Phe Leu Leu Thr His
105 165 170 175
106 Lys Lys Arg Leu Thr Asp Glu Glu Phe Arg Glu Pro Ser Thr Gly Lys
107 180 185 190
108 Thr Cys Leu Pro Lys Ala Leu Leu Asn Leu Ser Asn Gly Arg Asn Asp

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RAW SEQUENCE LISTING

DATE: 09/07/2004

PATENT APPLICATION: US/10/668,846A

TIME: 17:04:13

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09072004\J668846A.raw

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109      195      200      205
110 Thr Ile Pro Val Leu Leu Asp Ile Ala Glu Arg Thr Gly Asn Met Arg
111      210      215      220
112 Glu Phe Ile Asn Ser Pro Phe Arg Asp Ile Tyr Tyr Arg Gly Gln Thr
113 225      230      235      240
114 Ala Leu His Ile Ala Ile Glu Arg Arg Cys Lys His Tyr Val Glu Leu
115      245      250      255
116 Leu Val Ala Gln Gly Ala Asp Val His Ala Gln Ala Arg Gly Arg Phe
117      260      265      270
118 Phe Gln Pro Lys Asp Glu Gly Gly Tyr Phe Tyr Phe Gly Glu Leu Pro
119      275      280      285
120 Leu Ser Leu Ala Ala Cys Thr Asn Gln Pro His Ile Val Asn Tyr Leu
121      290      295      300
122 Thr Glu Asn Pro His Lys Lys Ala Asp Met Arg Arg Gln Asp Ser Arg
123 305      310      315      320
124 Gly Asn Thr Val Leu His Ala Leu Val Ala Ile Ala Asp Asn Thr Arg
125      325      330      335
126 Glu Asn Thr Lys Phe Val Thr Lys Met Tyr Asp Leu Leu Leu Leu Lys
127      340      345      350
128 Cys Ala Arg Leu Phe Pro Asp Ser Asn Leu Glu Ala Val Leu Asn Asn
129      355      360      365
130 Asp Gly Leu Ser Pro Leu Met Met Ala Ala Lys Thr Gly Lys Ile Gly
131      370      375      380
132 Ile Phe Gln His Ile Ile Arg Arg Glu Val Thr Asp Glu Asp Thr Arg
133 385      390      395      400
134 His Leu Ser Arg Lys Phe Lys Asp Trp Ala Tyr Gly Pro Val Tyr Ser
135      405      410      415
136 Ser Leu Tyr Asp Leu Ser Ser Leu Asp Thr Cys Gly Glu Glu Ala Ser
137      420      425      430
138 Val Leu Glu Ile Leu Val Tyr Asn Ser Lys Ile Glu Asn Arg His Glu
139      435      440      445
140 Met Leu Ala Val Glu Pro Ile Asn Glu Leu Leu Arg Asp Lys Trp Arg
141      450      455      460
142 Lys Phe Gly Ala Val Ser Phe Tyr Ile Asn Val Val Ser Tyr Leu Cys
143 465      470      475      480
144 Ala Met Val Ile Phe Thr Leu Thr Ala Tyr Tyr Gln Pro Leu Glu Gly
145      485      490      495
146 Thr Pro Pro Tyr Pro Tyr Arg Thr Thr Val Asp Tyr Leu Arg Leu Ala
147      500      505      510
148 Gly Glu Val Ile Thr Leu Phe Thr Gly Val Leu Phe Phe Thr Asn
149      515      520      525
150 Ile Lys Asp Leu Phe Met Lys Lys Cys Pro Gly Val Asn Ser Leu Phe
151      530      535      540
152 Ile Asp Gly Ser Phe Gln Leu Leu Tyr Phe Ile Tyr Ser Val Leu Val
153 545      550      555      560
154 Ile Val Ser Ala Ala Leu Tyr Leu Ala Gly Ile Glu Ala Tyr Leu Ala
155      565      570      575
156 Val Met Val Phe Ala Leu Val Leu Gly Trp Met Asn Ala Leu Tyr Phe
157      580      585      590

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RAW SEQUENCE LISTING

DATE: 09/07/2004

PATENT APPLICATION: US/10/668,846A

TIME: 17:04:13

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09072004\J668846A.raw

```

158 Thr Arg Gly Leu Lys Leu Thr Gly Thr Tyr Ser Ile Met Ile Gln Lys
159           595           600           605
160 Ile Leu Phe Lys Asp Leu Phe Arg Phe Leu Leu Val Tyr Leu Leu Phe
161           610           615           620
162 Met Ile Gly Tyr Ala Ser Ala Leu Val Ser Leu Leu Asn Pro Cys Ala
163           625           630           635           640
164 Asn Met Lys Val Cys Asn Glu Asp Gln Thr Asn Cys Thr Val Pro Thr
165           645           650           655
166 Tyr Pro Ser Cys Arg Asp Ser Glu Thr Phe Ser Thr Phe Leu Leu Asp
167           660           665           670
168 Leu Phe Lys Leu Thr Ile Gly Met Gly Asp Leu Glu Met Leu Ser Ser
169           675           680           685
170 Thr Lys Tyr Pro Val Val Phe Ile Ile Leu Leu Val Thr Tyr Ile Ile
171           690           695           700
172 Leu Thr Phe Val Leu Leu Leu Asn Met Leu Ile Ala Leu Met Gly Glu
173           705           710           715           720
174 Thr Val Gly Gln Val Ser Lys Glu Ser Lys His Ile Trp Lys Leu Gln
175           725           730           735
176 Trp Ala Thr Thr Ile Leu Asp Ile Glu Arg Ser Phe Pro Val Phe Leu
177           740           745           750
178 Arg Lys Ala Phe Arg Ser Gly Glu Met Val Thr Val Gly Lys Ser Ser
179           755           760           765
180 Asp Gly Thr Pro Asp Arg Arg Trp Cys Phe Arg Val Asp Glu Val Asn
181           770           775           780
182 Trp Ser His Trp Asn Gln Asn Leu Gly Ile Ile Asn Glu Asp Pro Gly
183           785           790           795           800
184 Lys Asn Glu Thr Tyr Gln Tyr Tyr Gly Phe Ser His Thr Val Gly Arg
185           805           810           815
186 Leu Arg Arg Asp Arg Trp Ser Ser Val Val Pro Arg Val Val Glu Leu
187           820           825           830
188 Asn Lys Asn Ser Asn Pro Asp Glu Val Val Val Pro Leu Asp Ser Met
189           835           840           845
190 Gly Asn Pro Arg Cys Asp Gly His Gln Gln Gly Tyr Pro Arg Lys Trp
191           850           855           860
192 Arg Thr Asp Asp Ala Pro Leu
193           865           870

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195 <210> SEQ ID NO: 3

196 <211> LENGTH: 3223

197 <212> TYPE: DNA

198 <213> ORGANISM: Homo sapiens

200 <400> SEQUENCE: 3

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202 ggccctggggc aggcattggc gattccagcg aaggcccccg cggggggccc ggggaggtgg      120
203 ctgagctccc cgggggatgag agtggcaccc caggtgggga ggcttttccct ctctcctccc      180
204 tggccaatct gtttgagggg gaggatggct ccctttcgcc ctcaccggct gatgccagtc      240
205 gccctgctgg ccaggcgat gggcgaccaa atctgcgcac gaagttccag ggcgccttcc      300
206 gcaaggggggt gcccaccccc atcgatctgc tggagtccac cctatatgag tcctcggtgg      360
207 tgccctgggccc caagaaagca cccatggact cactgtttga ctacggcacc tatcgtcacc      420
208 actccagtga caacaagagg tggaggaaga agatcataga gaagcagccg cagagcccca      480

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RAW SEQUENCE LISTING

DATE: 09/07/2004

PATENT APPLICATION: US/10/668,846A

TIME: 17:04:13

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09072004\J668846A.raw

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209 aagccccctgc cccctcagccg ccccccatcc tcaaagtctt caaccggcct atcctctttg 540
210 acatcgtgtc ccggggctcc actgctgacc tggacgggct gctcccattc ttgctgaccc 600
211 acaagaaacg cctaactgat gaggagtttc gagagccatc tacggggaag acctgcctgc 660
212 ccaaggcctt gctgaacctg agcaatggcc gcaacgacac catccctgtg ctgctggaca 720
213 tcgcggagcg caccggcaac atgcgggagt tcattaacte gcccttccgt gacatctact 780
214 atcgagggtca gacagccctg cacatcgcca ttgagcgctg ctgcaaacac tacgtggaac 840
215 ttctcgtggc ccagggaagt gatgtccacg cccaggcccg tgggcgcttc ttccagccca 900
216 aggatgaggg gggctacttc tactttgggg agctgcccct gtcgctggct gcctgcacca 960
217 accagcccca cattgtcaac tacctgacgg agaaccacca caagaaggcg gacatgcggc 1020
218 gccaggactc gcgaggcaac acagtgtctg atgcgctggg ggccattgct gacaacaccc 1080
219 gtgagaacac caagtttgtt accaagatgt acgacctgct gctgctcaag tgtgcccgcc 1140
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221 tggctgccaa gacgggcaag attgggatct ttcagcacat catccggcgg gaggtgacgg 1260
222 atgaggacac acggcacctg tcccgaagt tcaaggactg ggccatggg ccagtgtatt 1320
223 cctcgtttta tgacctctcc tccttgga cgtgtgggga agaggcctcc gtgctggaga 1380
224 tcctgggtgta caacagcaag attgagaacc gccacgagat gctggctgtg gagcccatca 1440
225 atgaactgct gcgggacaag tggcgcaagt tcggggccgt ctcttctac atcaacgtgg 1500
226 tctcctacct gtgtgccatg gtcattctca ctctaccgc ctactaccag ccgctggagg 1560
227 gcacaccgcc gtacccttac cgcaccacgg tggactacct gcggctggct ggcgagggtca 1620
228 ttacgctctt cactggggtc ctgttcttct tcaccaacat caaagacttg ttcatgaaga 1680
229 aatgccctgg agtgaattct ctcttcattg atggctcctt ccagctgctc tacttcatct 1740
230 actctgtcct ggtgatectc tcagcagccc tctacctggc agggatcgag gcctacctgg 1800
231 ccgtgatggg ctttgccctg gtccctgggt ggatgaatgc cctttacttc acccgtgggc 1860
232 tgaagctgac ggggacctat agcatcatga tccagaagat tctcttcaag gaccttttcc 1920
233 gattcctgct cgtctacttg ctcttcatga tcggctacgc ttcagccctg gtctccctcc 1980
234 tgaaccctg tgcgaacctg aaggtgtgca atgaggacca gaccaactgc acagtgccca 2040
235 cttaccctc gtgccgtgac agcgagacct tcagcacctt cctcctggac ctgtttaagc 2100
236 tgaccattgg catgggcgac ctggagatgc tgagcagcac caagtacccc gtggtcttca 2160
237 tcatcctgct ggtgacctac atcatcctca cctttgtgct gtcctcaac atgctcattg 2220
238 ccctcatggg cgagacagtg ggccaggtct ccaaggagag caagcacatc tgggaagctgc 2280
239 agtgggccac caccatctg gacattgagc gtccttccc cgtattcctg aggaaggcct 2340
240 tccgctctgg ggagatggtc accgtgggca agagctcgga cggcactcct gaccgcagg 2400
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243 gcctccgcag ggatcgctgg tctcgggtgg taccctcgt ggtggaactg aacaagaact 2580
244 cgaaccgcga cgaggtggtg gtgcctctgg acagcatggg gaacccccgc tgcgatggcc 2640
245 accagcaggg ttacccccgc aagtggagga ctgatgacgc cccgctctag ggactgcagc 2700
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253 tttgcaaggg gctggggccc tcggcgctgg gccatgcctt ctgtgtgttc tgtagtgtct 3180
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256 <210> SEQ ID NO: 4
257 <211> LENGTH: 3237
258 <212> TYPE: DNA

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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/668,846A

DATE: 09/07/2004

TIME: 17:04:14

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09072004\J668846A.raw



IFWO

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/668,846A

DATE: 09/03/2004

TIME: 11:38:42

Input Set : A:\USSequence.txt

Output Set: N:\CRF4\09032004\J668846A.raw

Does Not Comply
Corrected Diskette Needed

4 <110> APPLICANT: Graham D. Smith
 5 Philip David Hayes
 6 Darren Smart
 8 <120> TITLE OF INVENTION: Novel Compounds
 11 <130> FILE REFERENCE: GP30201V
 13 <140> CURRENT APPLICATION NUMBER: 10/668,846A
 C--> 15 <141> CURRENT FILING DATE: 2003-09-23
 <151> 15 <150> PRIOR APPLICATION NUMBER: GB9905557.6
 W--> 16 <150> PRIOR APPLICATION NUMBER: 1999-03-11
 W--> 18 <150> PRIOR APPLICATION NUMBER: GB9923635.8
 W--> 19 <150> PRIOR APPLICATION NUMBER: 1999-10-06
 <151> 22 <160> NUMBER OF SEQ ID NOS: 4
 24 <170> SOFTWARE: FastSEQ for Windows Version 3.0
 26 <210> SEQ ID NO: 1
 27 <211> LENGTH: 2616
 28 <212> TYPE: DNA
 29 <213> ORGANISM: Homo sapiens
 31 <400> SEQUENCE: 1
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 34 gagggggagg atggctccct ttgcctctca ccggtgatg ccagtcgccc tgctggccca 180
 35 ggcgatgggc gaccaaactt gcgcataaag ttccaggcgt ccttcgcaa gggggtgccc 240
 36 aaccccatcg atctgctgga gtccacccta tatgagtcct cgggtggtgc tgggccaag 300
 37 aaagcaccca tggactcact gtttgactac ggcacctatc gtcaccactc cagtgacaac 360
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 41 actgatgagg agtttcgaga gccatctacg gggaagacct gcctgcccac ggccttgctg 600
 42 aacctgagca atggcgcaa cgacaccatc cctgtgctgc tggacatcgc ggagcgcacc 660
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 51 ggcaagattg ggaatttcaa gcacatcatc cggcgggagg tgacggatga ggacacacgg 1200
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/668,846A

DATE: 09/03/2004

TIME: 11:38:42

Input Set : A:\USSequence.txt

Output Set: N:\CRF4\09032004\J668846A.raw

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58 ggggtcctgt tcttcttcac caacatcaaa gacttggtca tgaagaaatg ccctggagtg 1620
59 aattctctct tcattgatgg ctccctccag ctgctctact tcatctactc tgtcctggtg 1680
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61 gccctggtcc tgggctggat gaatgccctt tacttcaccc gtgggctgaa gctgacgggg 1800
62 acctatagca tcatgatcca gaagattctc ttcaaggacc ttttccgatt cctgctcgtc 1860
63 tacttgctct tcatgatcgg ctacgcttca gccctggtct ccctcctgaa cccgtgtgcc 1920
64 aacatgaagg tgtgcaatga ggaccagacc aactgcacag tgcccactta cccctcgtgc 1980
65 cgtgacagcg agaccttcag caccttcctc ctggacctgt ttaagctgac cattggcatg 2040
66 ggcgacctgg agatgctgag cagcaccaag taccocgtgg tcttcatcat cctgctggtg 2100
67 acctacatca tcctcacctt tgtgctgctc ctcaacatgc tcattgccct catgggcgag 2160
68 acagtgggcc aggtctccaa ggagagcaag cacatctgga agctgcagtg ggccaccacc 2220
69 atcctggaca ttgagcgctc cttccccgta ttctgagga aggccttcog ctctggggag 2280
70 atggtcaccg tgggcaagag ctcggaacgg actcctgacc gcagggtgtg cttcagggtg 2340
71 gatgaggtga actggtctca ctggaaccag aacttgggca tcatcaacga ggaccgggc 2400
72 aagaatgaga cctaccagta ttatggcttc tcgcataacc tgggcgcgct ccgcagggat 2460
73 cgctggctct cgggtgtacc ccgcgtggtg gaactgaaca agaactcgaa cccggacgag 2520
74 gtggtggtgc ctctggacag catggggaac ccccgctgcg atggccacca gcagggttac 2580
75 ccccgcaagt ggaggactga tgacgccccg ctctag 2616

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77 <210> SEQ ID NO: 2

78 <211> LENGTH: 871

79 <212> TYPE: PRT

80 <213> ORGANISM: Homo sapiens

82 <400> SEQUENCE: 2

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83 Met Ala Asp Ser Ser Glu Gly Pro Arg Ala Gly Pro Gly Glu Val Ala
84 1 5 10 15
85 Glu Leu Pro Gly Asp Glu Ser Gly Thr Pro Gly Gly Glu Ala Phe Pro
86 20 25 30
87 Leu Ser Ser Leu Ala Asn Leu Phe Glu Gly Glu Asp Gly Ser Leu Ser
88 35 40 45
89 Pro Ser Pro Ala Asp Ala Ser Arg Pro Ala Gly Pro Gly Asp Gly Arg
90 50 55 60
91 Pro Asn Leu Arg Met Lys Phe Gln Gly Ala Phe Arg Lys Gly Val Pro
92 65 70 75 80
93 Asn Pro Ile Asp Leu Leu Glu Ser Thr Leu Tyr Glu Ser Ser Val Val
94 85 90 95
95 Pro Gly Pro Lys Lys Ala Pro Met Asp Ser Leu Phe Asp Tyr Gly Thr
96 100 105 110
97 Tyr Arg His His Ser Ser Asp Asn Lys Arg Trp Arg Lys Lys Ile Ile
98 115 120 125
99 Glu Lys Gln Pro Gln Ser Pro Lys Ala Pro Ala Pro Gln Pro Pro Pro
100 130 135 140
101 Ile Leu Lys Val Phe Asn Arg Pro Ile Leu Phe Asp Ile Val Ser Arg
102 145 150 155 160
103 Gly Ser Thr Ala Asp Leu Asp Gly Leu Leu Pro Phe Leu Leu Thr His
104 165 170 175
105 Lys Lys Arg Leu Thr Asp Glu Glu Phe Arg Glu Pro Ser Thr Gly Lys
106 180 185 190
107 Thr Cys Leu Pro Lys Ala Leu Leu Asn Leu Ser Asn Gly Arg Asn Asp

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/668,846A

DATE: 09/03/2004

TIME: 11:38:42

Input Set : A:\USSequence.txt

Output Set: N:\CRF4\09032004\J668846A.raw

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108          195          200          205
109 Thr Ile Pro Val Leu Leu Asp Ile Ala Glu Arg Thr Gly Asn Met Arg
110          210          215          220
111 Glu Phe Ile Asn Ser Pro Phe Arg Asp Ile Tyr Tyr Arg Gly Gln Thr
112 225          230          235          240
113 Ala Leu His Ile Ala Ile Glu Arg Arg Cys Lys His Tyr Val Glu Leu
114          245          250          255
115 Leu Val Ala Gln Gly Ala Asp Val His Ala Gln Ala Arg Gly Arg Phe
116          260          265          270
117 Phe Gln Pro Lys Asp Glu Gly Gly Tyr Phe Tyr Phe Gly Glu Leu Pro
118          275          280          285
119 Leu Ser Leu Ala Ala Cys Thr Asn Gln Pro His Ile Val Asn Tyr Leu
120          290          295          300
121 Thr Glu Asn Pro His Lys Lys Ala Asp Met Arg Arg Gln Asp Ser Arg
122 305          310          315          320
123 Gly Asn Thr Val Leu His Ala Leu Val Ala Ile Ala Asp Asn Thr Arg
124          325          330          335
125 Glu Asn Thr Lys Phe Val Thr Lys Met Tyr Asp Leu Leu Leu Leu Lys
126          340          345          350
127 Cys Ala Arg Leu Phe Pro Asp Ser Asn Leu Glu Ala Val Leu Asn Asn
128          355          360          365
129 Asp Gly Leu Ser Pro Leu Met Met Ala Ala Lys Thr Gly Lys Ile Gly
130          370          375          380
131 Ile Phe Gln His Ile Ile Arg Arg Glu Val Thr Asp Glu Asp Thr Arg
132 385          390          395          400
133 His Leu Ser Arg Lys Phe Lys Asp Trp Ala Tyr Gly Pro Val Tyr Ser
134          405          410          415
135 Ser Leu Tyr Asp Leu Ser Ser Leu Asp Thr Cys Gly Glu Glu Ala Ser
136          420          425          430
137 Val Leu Glu Ile Leu Val Tyr Asn Ser Lys Ile Glu Asn Arg His Glu
138          435          440          445
139 Met Leu Ala Val Glu Pro Ile Asn Glu Leu Leu Arg Asp Lys Trp Arg
140          450          455          460
141 Lys Phe Gly Ala Val Ser Phe Tyr Ile Asn Val Val Ser Tyr Leu Cys
142 465          470          475          480
143 Ala Met Val Ile Phe Thr Leu Thr Ala Tyr Tyr Gln Pro Leu Glu Gly
144          485          490          495
145 Thr Pro Pro Tyr Pro Tyr Arg Thr Thr Val Asp Tyr Leu Arg Leu Ala
146          500          505          510
147 Gly Glu Val Ile Thr Leu Phe Thr Gly Val Leu Phe Phe Phe Thr Asn
148          515          520          525
149 Ile Lys Asp Leu Phe Met Lys Lys Cys Pro Gly Val Asn Ser Leu Phe
150          530          535          540
151 Ile Asp Gly Ser Phe Gln Leu Leu Tyr Phe Ile Tyr Ser Val Leu Val
152 545          550          555          560
153 Ile Val Ser Ala Ala Leu Tyr Leu Ala Gly Ile Glu Ala Tyr Leu Ala
154          565          570          575
155 Val Met Val Phe Ala Leu Val Leu Gly Trp Met Asn Ala Leu Tyr Phe
156          580          585          590

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/668,846A

DATE: 09/03/2004

TIME: 11:38:42

Input Set : A:\USSequence.txt

Output Set: N:\CRF4\09032004\J668846A.raw

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157 Thr Arg Gly Leu Lys Leu Thr Gly Thr Tyr Ser Ile Met Ile Gln Lys
158          595          600          605
159 Ile Leu Phe Lys Asp Leu Phe Arg Phe Leu Leu Val Tyr Leu Leu Phe
160          610          615          620
161 Met Ile Gly Tyr Ala Ser Ala Leu Val Ser Leu Leu Asn Pro Cys Ala
162          625          630          635          640
163 Asn Met Lys Val Cys Asn Glu Asp Gln Thr Asn Cys Thr Val Pro Thr
164          645          650          655
165 Tyr Pro Ser Cys Arg Asp Ser Glu Thr Phe Ser Thr Phe Leu Leu Asp
166          660          665          670
167 Leu Phe Lys Leu Thr Ile Gly Met Gly Asp Leu Glu Met Leu Ser Ser
168          675          680          685
169 Thr Lys Tyr Pro Val Val Phe Ile Ile Leu Leu Val Thr Tyr Ile Ile
170          690          695          700
171 Leu Thr Phe Val Leu Leu Leu Asn Met Leu Ile Ala Leu Met Gly Glu
172          705          710          715          720
173 Thr Val Gly Gln Val Ser Lys Glu Ser Lys His Ile Trp Lys Leu Gln
174          725          730          735
175 Trp Ala Thr Thr Ile Leu Asp Ile Glu Arg Ser Phe Pro Val Phe Leu
176          740          745          750
177 Arg Lys Ala Phe Arg Ser Gly Glu Met Val Thr Val Gly Lys Ser Ser
178          755          760          765
179 Asp Gly Thr Pro Asp Arg Arg Trp Cys Phe Arg Val Asp Glu Val Asn
180          770          775          780
181 Trp Ser His Trp Asn Gln Asn Leu Gly Ile Ile Asn Glu Asp Pro Gly
182          785          790          795          800
183 Lys Asn Glu Thr Tyr Gln Tyr Tyr Gly Phe Ser His Thr Val Gly Arg
184          805          810          815
185 Leu Arg Arg Asp Arg Trp Ser Ser Val Val Pro Arg Val Val Glu Leu
186          820          825          830
187 Asn Lys Asn Ser Asn Pro Asp Glu Val Val Val Pro Leu Asp Ser Met
188          835          840          845
189 Gly Asn Pro Arg Cys Asp Gly His Gln Gln Gly Tyr Pro Arg Lys Trp
190          850          855          860
191 Arg Thr Asp Asp Ala Pro Leu
192          865          870
194 <210> SEQ ID NO: 3
195 <211> LENGTH: 3223
196 <212> TYPE: DNA
197 <213> ORGANISM: Homo sapiens
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202 ctgagctccc cggggatgag agtggcaccc caggtgggga ggcttttccct ctctcctccc      180
203 tggccaatct gtttgagggg gaggatggct ccttttcgcc ctcaccggct gatgccagtc      240
204 gccctgctgg ccagggcgat gggcgaccaa atctgcgcac gaagttccag ggcgccttcc      300
205 gcaagggggg gcccaacccc atcgatctgc tggagtccac cctatatgag tctcgggtgg      360
206 tgcttggggc caagaaagca cccatggact cactgtttga ctacggcacc tatcgtcacc      420
207 actccagtga caacaagagg tggaggaaga agatcataga gaagcagccg cagagcccca      480

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/668,846A

DATE: 09/03/2004

TIME: 11:38:42

Input Set : A:\USSequence.txt

Output Set: N:\CRF4\09032004\J668846A.raw

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210 acaagaaacg cctaactgat gaggagtttc gagagccatc tacggggaag acctgcctgc 660
211 ccaaggcctt gctgaacctg agcaatggcc gcaacgcacac catccctgtg ctgctggaca 720
212 tcgcgagagc caccggcaac atgcgggagt tcatctaact gcccttccgt gacatctact 780
213 atcgagggtc gacagccctg cacatcgcca ttgagcgctg ctgcaaacac tacgtggaac 840
214 ttctcgtggc ccagggagct gatgtccacg cccaggcccg tgggcgcttc ttccagccca 900
215 aggatgaggg gggctacttc tactttgggg agctgcccct gtcgtgggtt gcctgcacca 960
216 accagcccca cattgtcaac tacctgacgg agaaccccca caagaaggcg gacatgcggc 1020
217 gccaggactc gcgaggcaac acagtgtctg atgcgctggt ggccattgct gacaacaccc 1080
218 gtgagaacac caagtttgtt accaagatgt acgacctgct gctgctcaag tgtgcccgc 1140
219 tcttccccga cagcaacctg gaggcctgct tcaacaacga cggcctctcg cccctcatga 1200
220 tggctgccaa gacgggcaag attgggatct ttcagcacat catccggcgg gaggtgcagg 1260
221 atgaggacac acggcacctg tcccgcgaag tcaaggactg ggcctatggg ccagtgtatt 1320
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232 gattcctgct cgtctacttg ctctcatga tcggctacgc ttcagccctg gtctccctcc 1980
233 tgaaccctg tgccaacatg aaggtgtgca atgaggacca gaccaactgc acagtgccca 2040
234 cttacccttc gtgctgtgac agcgagacct tcagcacctt cctcctggac ctgtttaagc 2100
235 tgaccattgg catggcgac ctggagatgc tgagcagcac caagtacccc gtggtcttca 2160
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237 cctcatggg cgagacagt ggccaggtct ccaaggagag caagcacatc tggagctgc 2280
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241 acgaggaccg gggcaagaat gagacctacc agtattatgg cttctcgcat accgtgggcc 2520
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252 tttgcaaggg gctggggccc tcggcgctgg gccatgcctt ctgtgtgttc tgtagtgtct 3180
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256 <211> LENGTH: 3237
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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/668,846A

DATE: 09/03/2004

TIME: 11:38:43

Input Set : A:\USSequence.txt

Output Set: N:\CRF4\09032004\J668846A.raw

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L:16 M:289 W: Identifier Missing or Out-Of-Order, <150> PRIOR APP FILING DATE
L:18 M:289 W: Identifier Missing or Out-Of-Order, <150> PRIOR APP FILING DATE
L:19 M:289 W: Identifier Missing or Out-Of-Order, <150> PRIOR APP FILING DATE